What is Claimed is:

1. A powered latch assembly for locking a door having a lock engaging slot to a main housing, comprising:

a supporting frame adapted for mounting on said main housing, wherein said supporting frame has a locking slot and defines first and second slider ends thereof;

a motor assembly comprising a power motor supported by said supporting base and adapted for being powered by said main housing, and a driving arm driven by said power motor in a linear movable manner; and

a locking latch, defining a first guiding edge and a second guiding edge, having an inner coupling end coupling with said driving arm and an opposed latching end extended outwardly through said locking slot, wherein said driving arm linearly drives said locking latch moving between a locking position and an unlocked position;

wherein at said locking position, said second guiding edge of said locking latch is guided to slide on said second slider end of said locking slot to linearly and then pivotally move said locking latch to engage with said lock engaging slot of said door for locking up said door with said main housing, and at said unlocked position, said first guiding edge of said locking latch is guided to slide on said first slider end of said locking slot to linearly and then pivotally move said locking latch to disengage with said lock engaging slot of said door for unlocking said door with said main housing.

2. The powered latch assembly, as recited in claim 1, wherein said supporting frame further has a guiding slot longitudinally formed thereon, wherein said driving arm is slidably mounted on said guiding slot in said linearly movable manner so as to drive said locking latch to moving between said locking position and said unlocked position.

3. The powered latch assembly, as recited in claim 2, wherein said locking latch is elongated in shape wherein said first and said second guiding edges are inclindly formed on a first guided portion and a second guided portion of said locking latch respectively and adapted to guide said first and said second slider ends respectively for

sliding along said locking latch in order to move between said locking position and said unlocked position, wherein a first and a second inclined angle for said first and said second guiding edges respectively dictate the extent to which said locking latch is to be linearly and pivotally moved, and a length of said locking slot limits a maximum possible pivotal movement of said locking latch.

4. The powered latch assembly, as recited in claim 3, further comprising a feedback device provided on said supporting frame and operatively communicated with said locking latch in such a manner that said feedback device is capable of monitoring and detecting a movement and a position of said locking latch respectively during moving between said locking position and said unlocked position.

5. The powered latch assembly, as recited in claim 4, wherein said feedback device comprises at least one sensor mounted on a predetermined position on said supporting base and electrically connected to said power source for communicating a feedback signal, and a feedback actuation arrangement provided on said supporting base and operatively communicated with said locking latch in such a manner that when said locking latch is moved into a predetermined position, said sensor is arranged to be actuated by said feedback actuation arrangement through said feedback signal.

6. The powered latch assembly, as recited in claim 5, wherein said locking latch further has a gripping head formed on said latch end of said locking latch and adapted for engaging with said lock engaging slot of said door when said locking latch is pivotally driven to said locking position so as to lock up said door with respect to said main housing.

7. The powered latch assembly, as recited in claim 6, further comprising a safety device comprising a biasing muscle outwardly, integrally and transversely extended from said second guided portion of said locking latch wherein said second guiding edge is formed on said biasing muscle for guiding said locking latch moving between said locking position and said unlocked position, wherein said biasing surface is arranged to align with said second slider end of said locking slot when said locking latch is in said locked position, so that manual unlocking of said locking latch is substantially prevented.

8. The powered latch assembly, as recited in claim 7, wherein a width of said sliding slot is slightly larger than a thickness of said locking latch such that a lateral movement between said locking latch and said supporting frame is substantially restricted for retaining said locking latch within said supporting frame.

9. The powered latch assembly, as recited in claim 8, wherein said supporting frame further comprises a guiding holder peripherally and detachably mounted on a side boundary of said locking slot to form said first and said second slider end.

10. The powered latch assembly, as recited in claim 9, wherein said feedback actuation arrangement comprises an actuation rotor rotatably connected with said driving axle of said motor assembly and outwardly protruded from said driving axle in such a manner that when said driving axle is driven to rotate, said actuation rotor is also driven to rotate for actuating said sensor to generate said feedback signal.

11. The powered latch assembly, as recited in claim 9, wherein said feedback actuation arrangement comprises at least one protrusion actuator outwardly and transversely protruded from said first guided portion of said locking latch and arranged to actuate said sensor when said locking latch is linearly driven to move between said locking position and said unlocked position.

12. The powered latch assembly, as recited in claim 10, wherein said feedback actuation arrangement further comprises at least one protrusion actuator outwardly and transversely protruded from said first guided portion of said locking latch and arranged to actuate said sensor when said locking latch is linearly driven to move between said locking position and said unlocked position.

13. The powered latch assembly, as recited in claim 8, wherein said supporting frame further comprises an engaging member, having a rounded surface, mounted on said locking slot to form said first slider end thereof, wherein said rounded surface of said engaging member is adapted to guide said first guiding edge of said locking latch moving linearly and pivotally between said locking position and said unlocked position.

14. The powered latch assembly, as recited in claim 13, wherein said feedback actuation arrangement comprises an actuation rotor rotatably connected with said driving axle of said motor assembly and outwardly protruded from said driving axle in such a manner that when said driving axle is driven to rotate, said actuation rotor is also driven to rotate for actuating said sensor to generate said feedback signal.

15. The powered latch assembly, as recited in claim 13, wherein said feedback actuation arrangement comprises at least one protrusion actuator outwardly and transversely protruded from said first guided portion of said locking latch and arranged to actuate said sensor when said locking latch is linearly driven to move between said locking position and said unlocked position.

16. The powered latch assembly, as recited in claim 14, wherein said feedback actuation arrangement further comprises at least one protrusion actuator outwardly and transversely protruded from said first guided portion of said locking latch and arranged to actuate said sensor when said locking latch is linearly driven to move between said locking position and said unlocked position.

17. The powered latch assembly, as recited in claim 7, wherein said safety device further contains a safety slot formed adjacent and in parallel to said locking slot and communicated thereto in such a manner that said locking latch is adapted to be slightly pushed aside from said locking slot to said safety slot so that said biasing member dis-aligns with said second slider end of said locking slot and is capable of being manually moved to said unlocked position.

18. The powered latch assembly, as recited in claim 17, wherein said safety device comprises a resilient element mounted on said supporting frame for normally applying an urging force to said locking latch so as to normally retain said locking latch in said locking position.

19. The powered latch assembly, as recited in claim 18, wherein said supporting frame further comprises an engaging member, having a rounded surface, mounted on said locking slot to form said first slider end thereof, wherein said rounded surface of said engaging member is adapted to guide said first guiding edge of said locking latch moving linearly and pivotally between said locking position and said unlocked position.

20. The powered latch assembly, as recited in claim 19, wherein said feedback actuation arrangement comprises an actuation rotor rotatably connected with said driving axle of said motor assembly and outwardly protruded from said driving axle in such a manner that when said driving axle is driven to rotate, said actuation rotor is also driven to rotate for actuating said sensor to generate said feedback signal.

21. The powered latch assembly, as recited in claim 19, wherein said feedback actuation arrangement further comprises at least one protrusion actuator outwardly and transversely protruded from said first guided portion of said locking latch and arranged to actuate said sensor when said locking latch is linearly driven to move between said locking position and said unlocked position.

22. The powered latch assembly, as recited in claim 18, wherein said supporting frame further comprises a guiding holder peripherally and detachably mounted on a side boundary of said locking slot to form said first and said second slider end.

23. The powered latch assembly, as recited in claim 22, wherein said feedback actuation arrangement comprises an actuation rotor rotatably connected with said driving axle of said motor assembly and outwardly protruded from said driving axle in such a manner that when said driving axle is driven to rotate, said actuation rotor is also driven to rotate for actuating said sensor to generate said feedback signal.

24. The powered latch assembly, as recited in claim 22, wherein said feedback actuation arrangement further comprises at least one protrusion actuator outwardly and transversely protruded from said first guided portion of said locking latch and arranged to actuate said sensor when said locking latch is linearly driven to move between said locking position and said unlocked position.

25. The powered latch assembly, as recited in claim 6, further comprising a safety device comprising a biasing muscle outwardly, integrally and transversely extended from said second guided portion of said locking latch wherein said second guiding edge is formed on said biasing muscle for guiding said locking latch moving between said locking position and said unlocked position, wherein said biasing muscle is arranged to be received in said supporting frame when said locking latch is in said

locking position in such a manner that said locking latch is capable of manually and pivotally moving along said locking slot.

26. The powered latch assembly, as recited in claim 25, wherein said safety device comprises a resilient element mounted on said supporting frame for normally applying an urging force to said locking latch so as to normally retain said locking latch in said locking position.

27. The powered latch assembly, as recited in claim 26, wherein said supporting frame further comprises an engaging member, having a rounded surface, mounted on said locking slot to form said first slider end thereof, wherein said rounded surface of said engaging member is adapted to guide said first guiding edge of said locking latch moving linearly and pivotally between said locking position and said unlocked position.

28. The powered latch assembly, as recited in claim 27, wherein said feedback actuation arrangement comprises an actuation rotor rotatably connected with said driving axle of said motor assembly and outwardly protruded from said driving axle in such a manner that when said driving axle is driven to rotate, said actuation rotor is also driven to rotate for actuating said sensor to generate said feedback signal.

29. The powered latch assembly, as recited in claim 27, wherein said feedback actuation arrangement further comprises at least one protrusion actuator outwardly and transversely protruded from said first guided portion of said locking latch and arranged to actuate said sensor when said locking latch is linearly driven to move between said locking position and said unlocked position.

30. The powered latch assembly, as recited in claim 26, wherein said supporting frame further comprises a guiding holder peripherally and detachably mounted on a side boundary of said locking slot to form said first and said second slider end.

31. The powered latch assembly, as recited in claim 30, wherein said feedback actuation arrangement comprises an actuation rotor rotatably connected with said driving axle of said motor assembly and outwardly protruded from said driving axle in such a

manner that when said driving axle is driven to rotate, said actuation rotor is also driven to rotate for actuating said sensor to generate said feedback signal.

32. The powered latch assembly, as recited in claim 30, wherein said feedback actuation arrangement further comprises at least one protrusion actuator outwardly and transversely protruded from said first guided portion of said locking latch and arranged to actuate said sensor when said locking latch is linearly driven to move between said locking position and said unlocked position.